

ABSTRACT OF THE DISCLOSURE

A multiple-exposure defect elimination process for semiconductor devices being fabricated on semiconductor wafers using photomask parts, including one mask part that is  
5 defective, is disclosed. A semiconductor wafer is exposed to a first mask part that is at least partially defective, and then is exposed to a second mask part corresponding to the first mask part but that is at least substantially free from defects or with defects at different locations. The mask parts may be on  
10 the same or different photomasks, and have the same layout for a semiconductor device that is being fabricated. Furthermore, the semiconductor wafer may be exposed to the second or other additional mask parts one or more additional times.